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[Work I'm doing that may be relevant to ecosystem services](#)

- Development of the HexSim (formally PATCH) simulation model.
- Research on wildlife population dynamics, forecasting, species and stressor interactions, model complexity, and other topics.

[Services-related issues I might help with](#)

- How does habitat configuration, quality, connectivity, etc. translate into function?
- How do rates and patterns of change affect a population's ability to tolerate disturbance?
- What are the most important areas to protect, restore, etc?
- Will prioritization strategies change if our forecasting tools get more sophisticated?
- What circumstances warrant more complex models, and when is a simpler tool adequate?

[Why HexSim](#)

- It balances generality, parsimony, and ease of use.
- It is useful for a wide array of life histories, landscapes, and disturbance regimes.
- You can learn one tool, but apply it to many different research questions.
- Detail and realism can be added incrementally.
- The model produces easy-to-understand map-based outputs.
- Users can include stressor- and species-interactions in their simulations.
- Convenient I/O facilitates sharing data, assumptions, and results with colleagues.
- Its the state-of-the-art, and you have access to the developer.

[Why not HexSim](#)

- The model is not (yet) appropriate for simulating fish populations.
- Its not the right tool for evaluating biodiversity.
- You need a tool that can be used with fast optimization algorithms.

Selected Impacts

- ▣ 30+ Publications based on PATCH / HexSim
- ▣ Willamette Alternative Futures Study
- ▣ Delivery of PATCH & HexSim to EPA Clients
- ▣ Wildlife Forecasting with CLAMS (USFS)
- ▣ Innovative Forest Practices Act study
- ▣ WA DFW Fisher Reintroduction Study
- ▣ Wildlands Project Lynx & Marten Viability Study
- ▣ CBI 2008 Fisher Reintroduction Study
- ▣ NCEAS Connectivity Working Group
- ▣ NCEAS Great Basin Working Group
- ▣ SERDP Global Change & Stressor Interaction Study
- ▣ 2008 Norther Spotted Owl Recovery Plan
- ▣ Numerous Masters & Ph.D. Theses